

WOODWORKER'S WJOURNAL

"America's leading woodworking authority"™

Classic Project

In this plan you'll find:

- Step-by-step construction instruction.
- A complete bill of materials.
- Construction drawings and related photos.
- Tips to help you complete the project and become a better woodworker.

Classic Firetruck



Classic Firetruck

Old-fashioned pumper fires up young imaginations

There's something truly magical for kids about firetrucks and firefighters. Boys and girls alike, from the age of about 2½ years, develop an enduring fascination with this noble profession. Sure, our wooden truck won't have the blinking lights and shrill sirens of its battery-powered competition, but once their plastic fenders have cracked and the batteries have run down, much of their allure is lost. Our classic firetruck runs on a much more easily replenished fuel...imagination.

For those readers who write to encourage us to keep these classic wooden toys coming on a regular basis, this is another in the line of the fine wooden toys from the Kansas workshops of Fred Cairns and Kathy Dawson. It's similar in construction to the Dump Truck featured in our September/October 1991 issue.

To help make building the firetruck a little easier, we've asked Fred and Kathy's company, Lynes Unlimited, to offer a parts kit that will include all the wheels and pegs that you'll need.

The kit won't include any of the other parts, or the dowels, but it does include the leather thong for the firehose (see Parts Kit Ordering Information on page 65).

As shown, the firetruck is crafted mainly of oak, with some padauk accents. Start by cutting the chassis (A) and chassis extension (B) to size. Next, make the hood (C), lower hood (D) and grill (E). Use the table saw to cut the lower detail on the lower hood (see Lower Hood Detail), then add the hood and grill before laying out and cutting (with the band saw) the 2½ in. hood radius arc. The use of padauk for the grill

makes a nice contrasting accent to the other hood parts.

After the 2½ in. radius on the hood has been sanded smooth, use the ½ in. radius bearing-guided roundover bit in the router table to establish the stepped roundover detail around the top and sides of the grill, and on the top front end of the chassis. Mount the hood/lower hood/grill subassembly to the chassis, locating it flush with the step on the roundover at the chassis front. Then drill the holes for the various controls (steering wheel, gear shift, pedals).

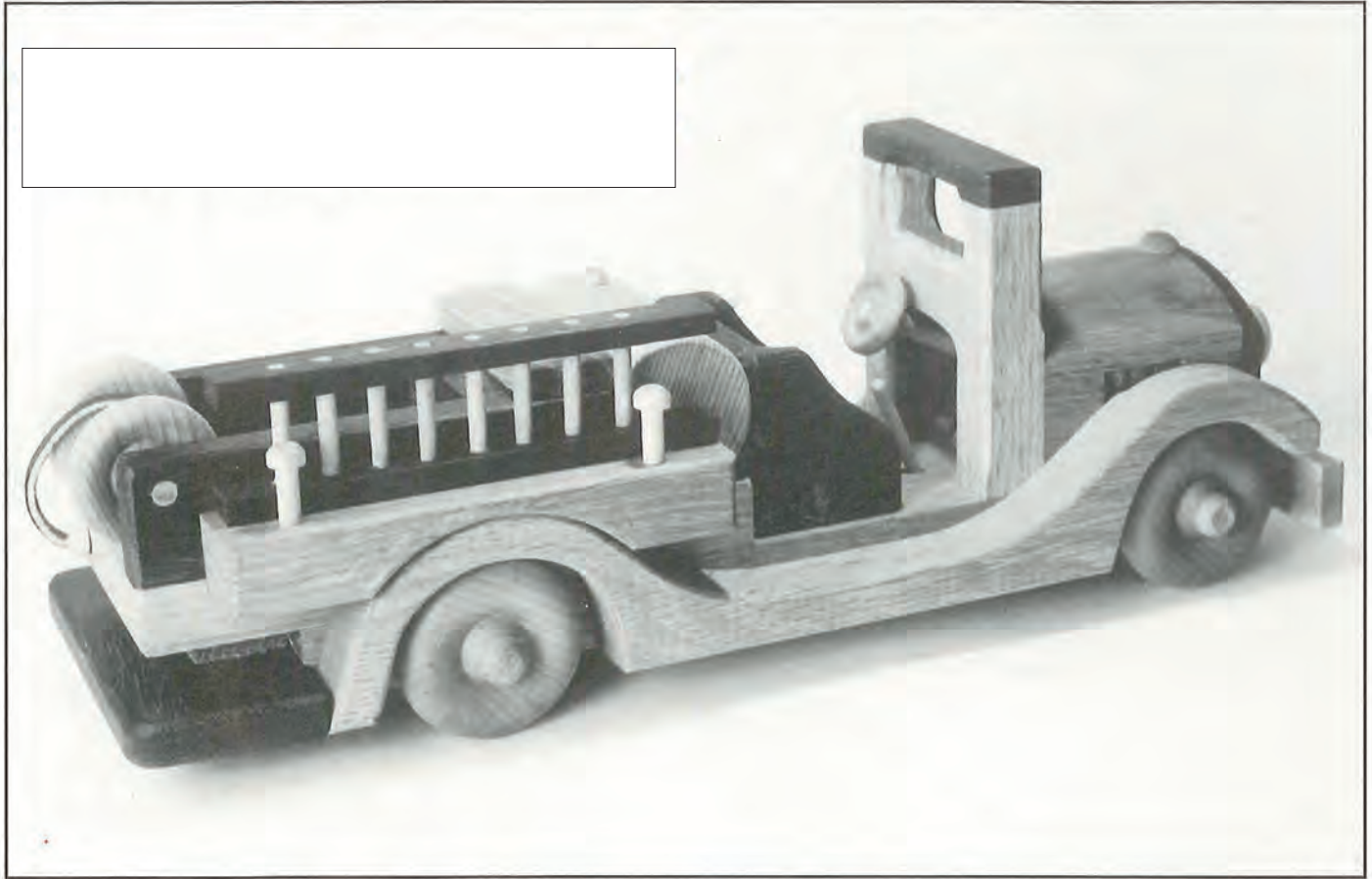
Next make the cab front and cap (F, G). Cut out the windshield opening at the top, and the recess for the controls at the bottom of the cab front, then glue the cap in place. With the ½ in. radius roundover bit still in the router table, apply the stepped roundover around the

The Woodworker's Journal



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makes a nice contrasting accent to the other hood parts.

After the 2½ in. radius on the hood has been sanded smooth, use the ⅜ in. radius bearing-guided roundover bit in the router table to establish the stepped roundover detail around the top and sides of the grill, and on the top front end of the chassis. Mount the hood/lower hood/grill subassembly to the chassis, locating it flush with the step on the roundover at the chassis front. Then drill the holes for the various controls (steering wheel, gear shift, pedals).

Next make the cab front and cap (F, G). Cut out the windshield opening at the top, and the recess for the controls at the bottom of the cab front, then glue the cap in place. With the ⅜ in. radius roundover bit still in the router table, apply the stepped roundover around the

windshield opening (both sides). Then glue the cab front/cap assembly to the chassis.

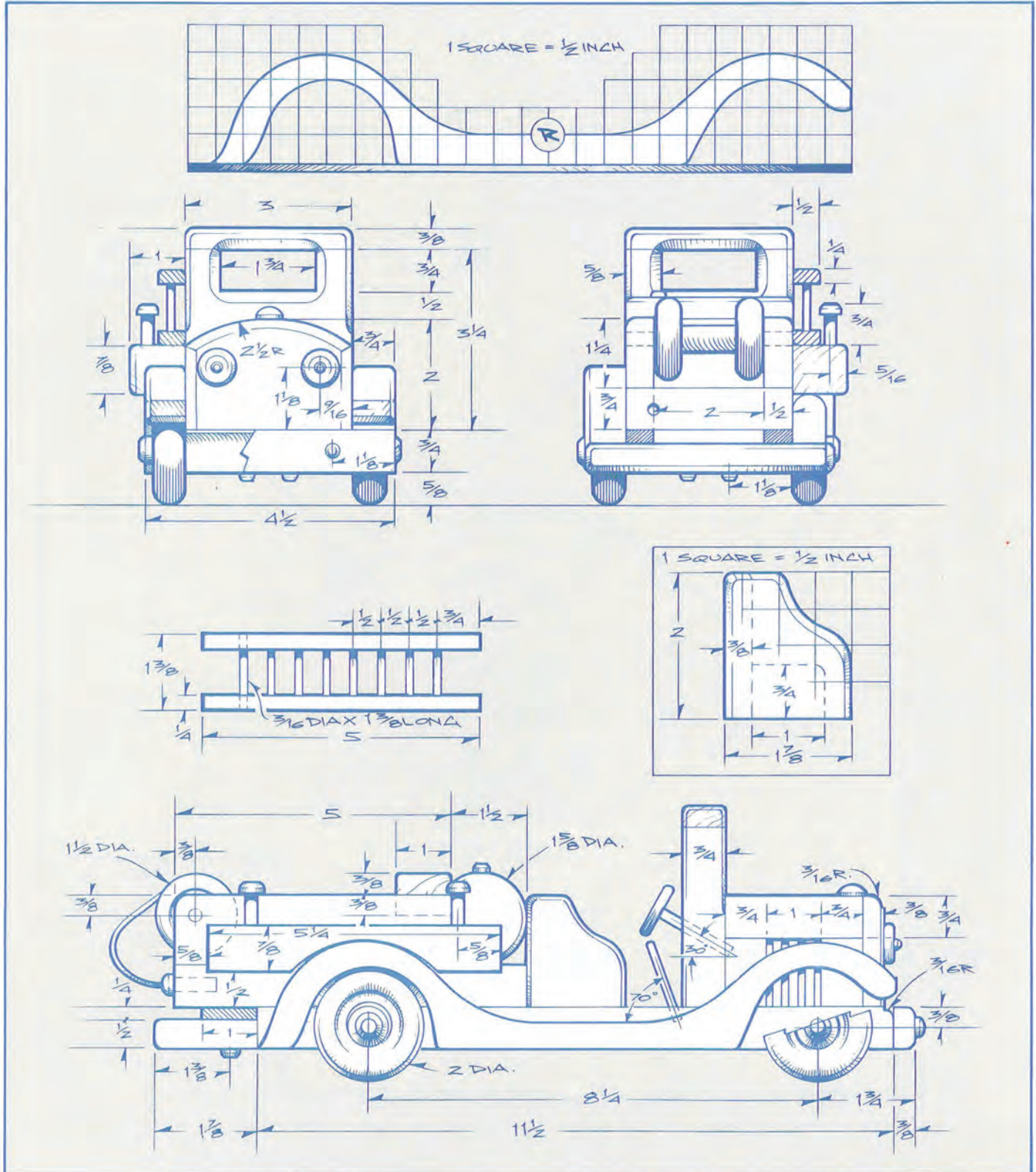
Make the seat (H), seat back (I) and seat sides (J), assemble these parts, and glue the seat assembly and the chassis extension in place. Then add the tank (K), the body sides (L) and the body divider (M). The tank is just a 3 in.

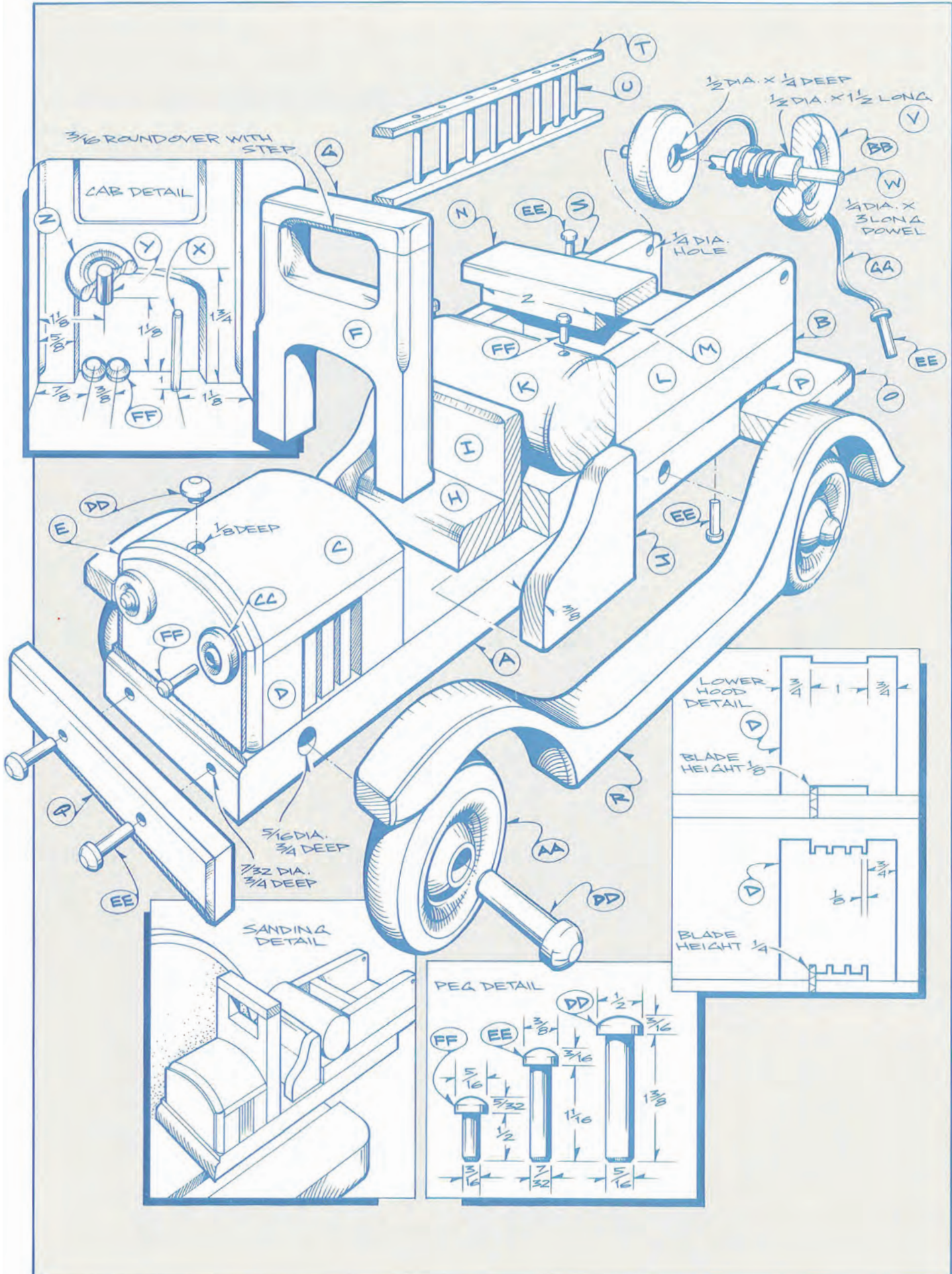
length of stair rail, available at any lumber or building supply yard. Sand the sides of the truck flush on a disk sander, as shown in the Sanding Detail. This is an important step, since the truck sides must be flush for the fenders to fit properly.

Now go to work on the fenders (R). Transfer the fender pattern from the grid

pattern to your stock, then cut the fenders out. For symmetry, use double-stick tape to join the two pieces of $\frac{3}{4}$ in. thick stock from which you'll cut the fenders, then cut and sand both fenders at the same time. Also, cut the compartment lid (N), back bumper (O), spacer (P) and front bumper (Q) to size.

Now, using either the drill press or a





3/16 ROUND OVER WITH STEP

CAB DETAIL

1/2 DIA. X 1/4 DEEP
1/2 DIA. X 1 1/2 LONG

1/4 DIA. HOLE

1/4 DIA. X 3 LONG POWEL

3/8 DEEP

3/16 DIA. X 3/4 DEEP
7/32 DIA. X 3/4 DEEP

SANDING DETAIL

LOWER HOOD DETAIL

BLADE HEIGHT 1/8

BLADE HEIGHT 3/4

PEG DETAIL

Bill of Materials
(all dimensions actual)

Part	Description	Size	No. Req'd.
A	Chassis	3/4 x 3 x 11 1/2	1
B	Chassis Extension	3/4 x 3 x 6 1/2	1
C	Hood	3/4 x 3 x 2 1/2	1
D	Lower Hood	1 1/4 x 3 x 2 1/2	1
E	Grill	3/8 x 3 x 2	1
F	Cab Front	3/4 x 3 x 3 1/4	1
G	Cab Front Cap	3/8 x 3/4 x 3	1
H	Seat	3/4 x 1 x 2	1
I	Seat Back	3/8 x 2 x 2	1
J	Seat Side	3/8 x 2 x 1 7/8	2
K	Tank	1 5/8 dia. x 3 long	1
L	Body Side	1/2 x 1 1/4 x 5	2
M	Body Divider	1/2 x 1 1/4 x 2	1
N	Compartment Lid	3/4 x 1 x 3	1
O	Back Bumper	1/2 x 1 7/8 x 4 1/2	1
P	Spacer	1/4 x 1 x 2	1
Q	Front Bumper	3/8 x 3/4 x 4 1/2	1
R	Fender	see Grid Pattern	2
S	Ladder Support	7/8 x 1 x 5 1/4	1
T	Ladder Rail	1/4 x 1/2 x 5	2
U	Ladder Rung	3/16 dia. x 1 3/8 long	8
V	Hose Reel Center	1/2 dia. x 1 1/2 long	1
W	Hose Reel Axle	1/4 dia. x 3 long	1
X	Gear Shift	3/16 dia. x 1 1/2 long	1
Y	Steering Column	7/32 dia. x 1 3/4 long	1
Z	Steering Wheel*	1 dia. x 5/16 thick	1
AA	Wheel*	2 dia. x 5/8 thick	4
BB	Hose Reel End*	1 1/2 dia. x 1/2 thick	2
CC	Headlight*	3/4 dia. x 3/16 thick	2
DD	Axle/Radiator Cap Peg*	see Peg Detail	5
EE	Bumper/Ladder Retainer/Hose Nozzle Peg*	see Peg Detail	7
FF	Pedal/Headlight/ Tank Peg*	see Peg Detail	5
GG	Hose*	1/8 wide x 14 long leather	1



hand-held drill, make the holes for the axle pegs, radiator cap, headlight pegs, and the various other pegs and dowels. Note that the hose reel is an assembly of a 1/2 in. diameter center dowel (V), sandwiched between the two reel ends (BB), which is then drilled through so that it pivots around the hose reel axle (W). One end of the leather hose thong (GG) is glued into a small hole in the center dowel, the other end is glued into a small hole drilled into the head of a medium-sized peg (EE). An oversize hole in the end of the chassis extension then houses the peg shaft. The peg is not glued into this hole, it just serves as a place to rest the peg when the hose is coiled.

You'll note that the parts kit includes three sizes of pegs. Four of the five large axle pegs (DD) hold the four large wheels (AA) in place, the fifth peg is shortened and serves as the radiator cap. The medium sized pegs (EE) serve to hold the front and back bumpers in place (the two pegs for the back bumper are inserted from the bottom, through the back bumper and spacer and into the

chassis extension), as retainers for the ladder, and as the hose end. The small pegs (FF) serve as pedals, the tank filler cap, and to mount the headlights (CC).

All that's left is to mount the fenders, make and mount the ladder support (S) and the ladder (T, U), and finish off a few last details. The fenders are glued in place flush with the bottom of the chassis. Cut the ladder support to size, shape it to match the profile of the fender that it nests over, then locate and glue the ladder support in place. To make the ladder, cut the ladder rails, then drill through both rails at the same time for the rungs, spacing the holes about 1/2 in. apart. Cut the rungs to length, glue them in place, and sand the ends flush with the rails. Finally, glue the gear shift (X) steering column (Y) and steering wheel (Z) in place.

With your assembly complete, be sure to round all sharp edges. We don't generally recommend a finish for toys, but if you'd like a finish to bring up some of the natural beauty of the wood, try a food-safe finish like Preserve Non-Toxic Nut Oil.